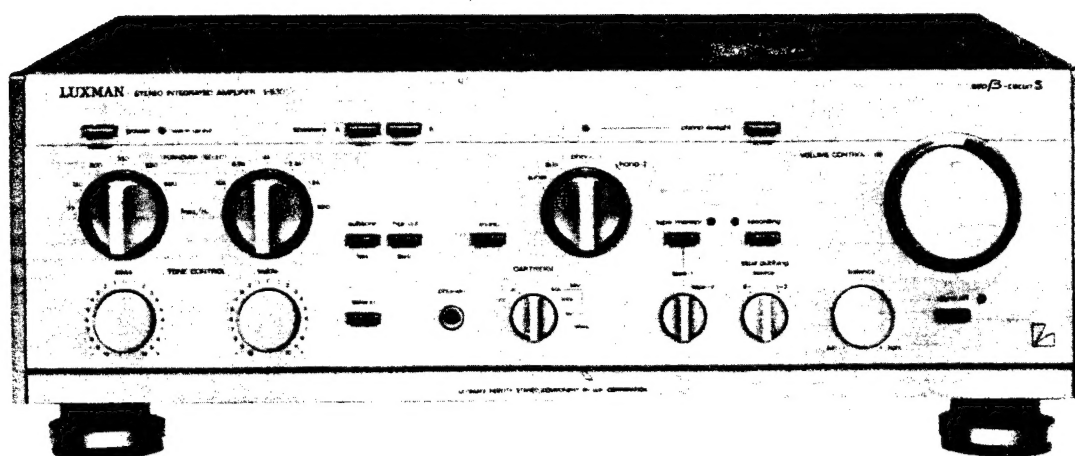


# SERVICE MANUAL

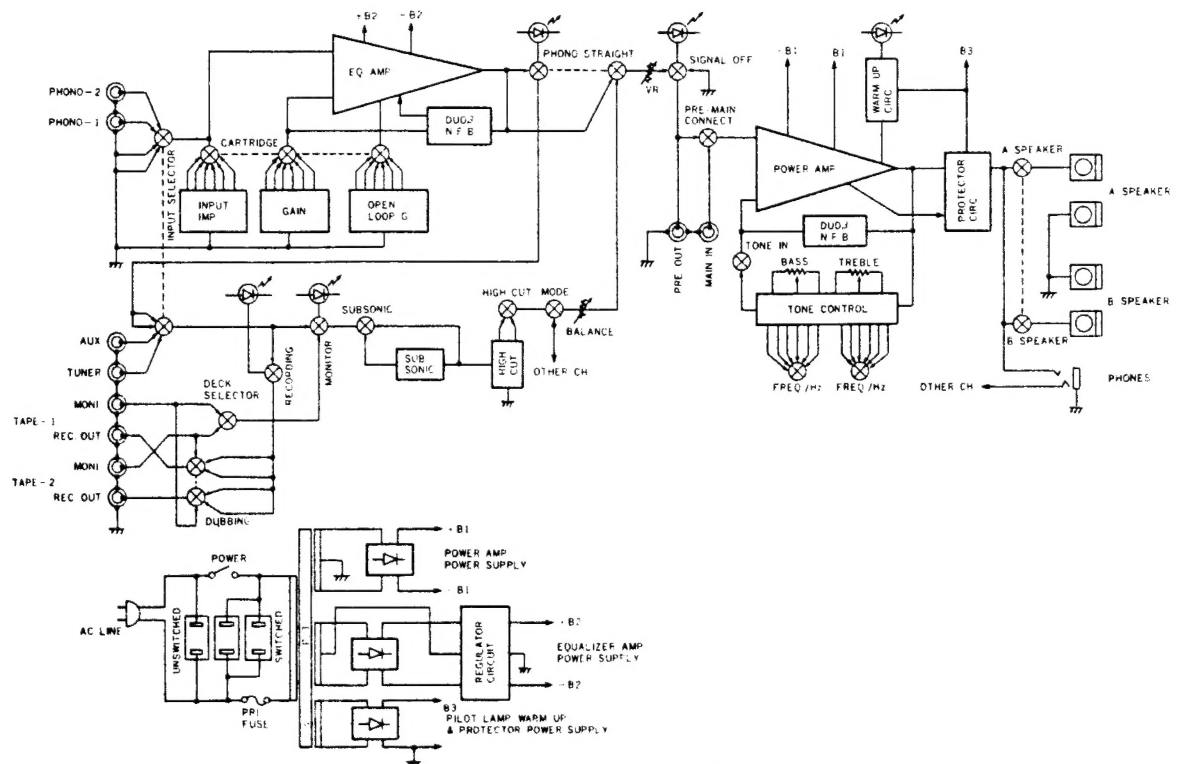
## Duo-Beta Circuit/S Stereo Integrated Amplifier **L-510/L-530**



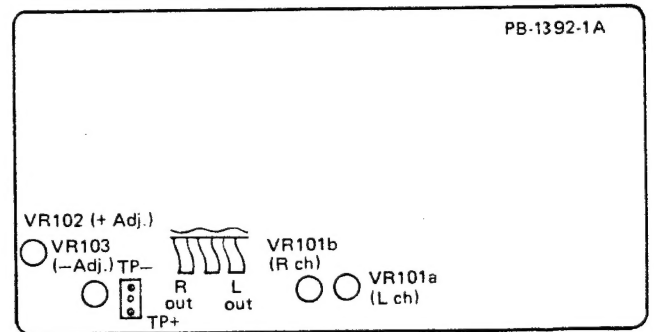
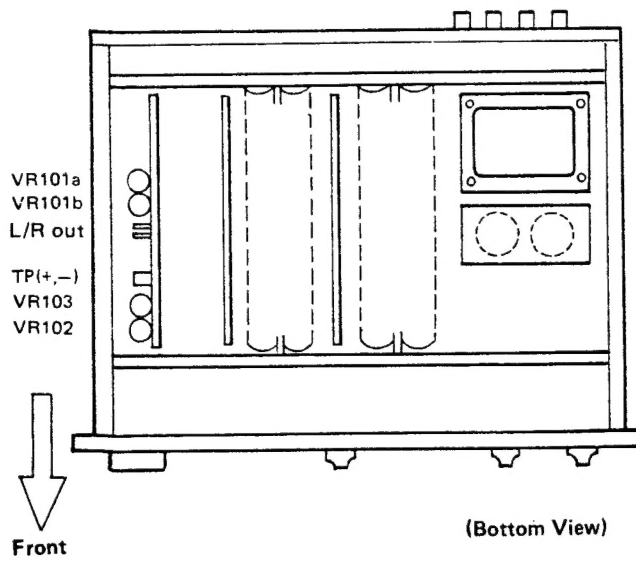
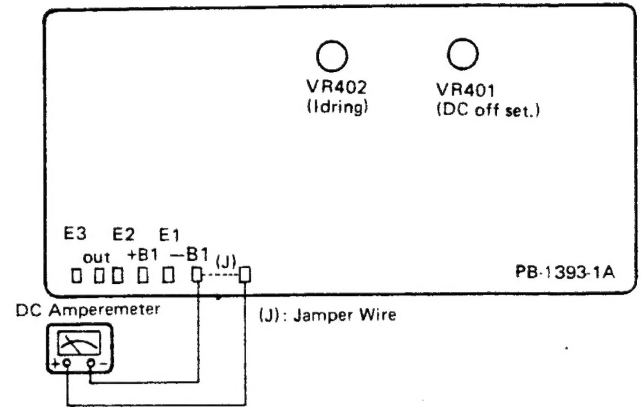
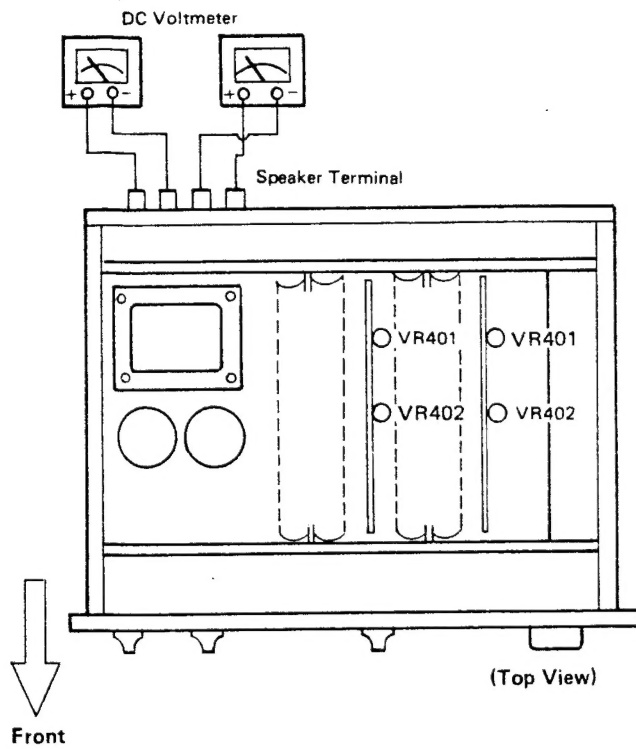
# Contents

Block Diagram	1
Alignment Locations	2
Alignment Procedure	3
調整手順書	4
Exploded View Parts List	5, 6
Packing Material Parts List	7
PCB, PB1392-1A Parts List	8, 9
PCB, PB1392-2A 2A Parts List	10
PCB, PB1392-3A Parts List	11
PCB, PB1392-4A Parts List	11
PCB, PB1392-5A Parts List	11
PCB, PB1392-6A Parts List	11
PCB, PB1413 Parts List	12
PCB PB1392-7A Parts List	12
PCB, PB1393-1A, 2A Parts List	12, 13
PCB, PB1393-3A Parts List	14
PCB, PB1393-4A Parts List	14
PCB, PB1394-1A Parts List	15
PCB, PB1394-2A Parts List	15
PCB, PB1394-3A Parts List	16
PCB, PB1394-4A Parts List	16
PCB, PB1394-5A Parts List	16
PCB, PB1394-6A Parts List	17
PCB, PB1394-7A Parts List	17
PCB, PB1394-8A Parts List	17
PCB, PB1394 (LED) Parts List	17
Miscellaneous Parts List	18
Procedure (Remote Switch)	18
Destination's Parts List	19
IC Handling Guide	19
Schematic Diagram (L-510)	20, 21
Schematic Diagram (L-530)	22, 23
Specifications	24

## Block Diagram



# Adjustment Locations



# Alignment Procedure

## 1. Alignment of Mainamp. section DC Offset and Idling Current

### (1) Setting Conditions

Volume Control: minimum  
Balance Control: center point  
Tone Control: flat  
Speaker Selector Switch: A  
VR401(DC Offset adjusting VR): center point  
VR402(Idling Current adjusting VR): Turn counter clockwise to the end.

(2) Connect a DC voltmeter to Speaker Terminals A.

(3) Disconnect the plated wires (jumper wires) connected to the terminals shown on the main PCB(PB-1391-1) and connect a DC amperemeter to the terminals for both L-CH and R-CH.

(4) Press to switch Power Switch ON and after one minute adjust VR402 to make the amperemeter connected in the above-mentioned procedure No. 3 read 150mA. Then, adjust VR402 for another channel again. But in this case, idling current for this channel should be matched to the idling current adjusted first with the another channel since the idling current adjusted first must have been increased.

Remarks: This adjustment should be done when the unit is cooled off. (Value of the primary current is 1.5 - 2.5A).

(5) Adjust VR401 to make the DC voltmeter connected to Speaker Terminals A in the procedure No. 2 read 0V(within  $\pm 50\text{mV}$ ).

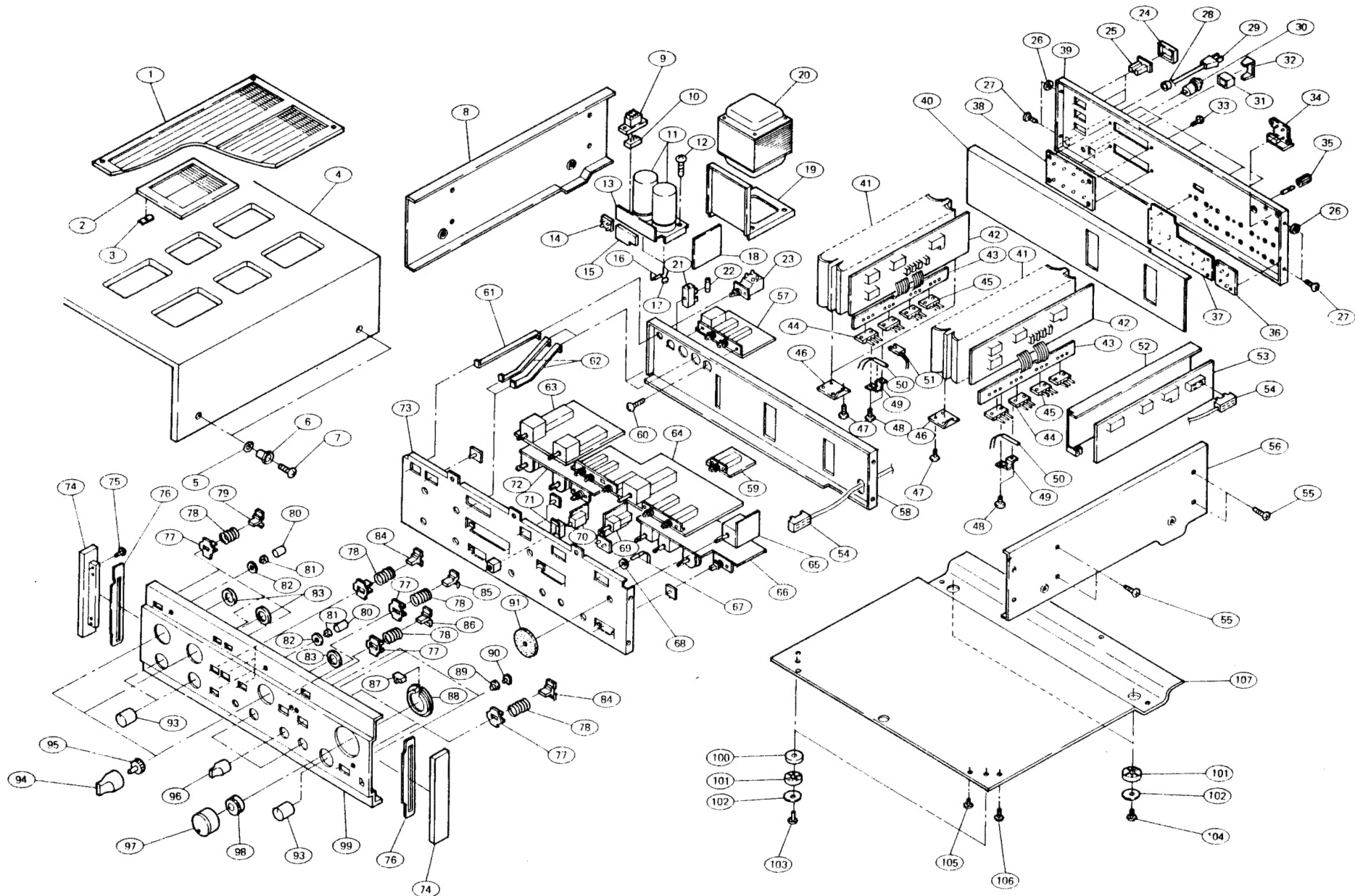
## 2. Alignment of Equalizer section DC Offset

(1) Adjust VR102(positive) and VR103(negative) to make the DC voltmeter connected to the test-point, TP(positive) and TP(negative) of 3-P connector read +30V and -30V respectively.

(2) Connect a DC voltmeter to REC-OUT and adjust VR101a(L-CH) and VR101b(R-CH) to make the voltmeter read 0V on L-Out and R-Out. This adjustment shall be made easier by setting Cartridge Impedance Selector between MC 40-ohm and 300-ohm and making servo time-constant smaller with eventual connection of resistance of 1.5M-Ohm and 68K-Ohm in parallel in its circuitry.

Remarks: Note that no wind should be admitted once the inside temperature of the unit has got stable as voltage may fluctuate if so.

# Exploded View

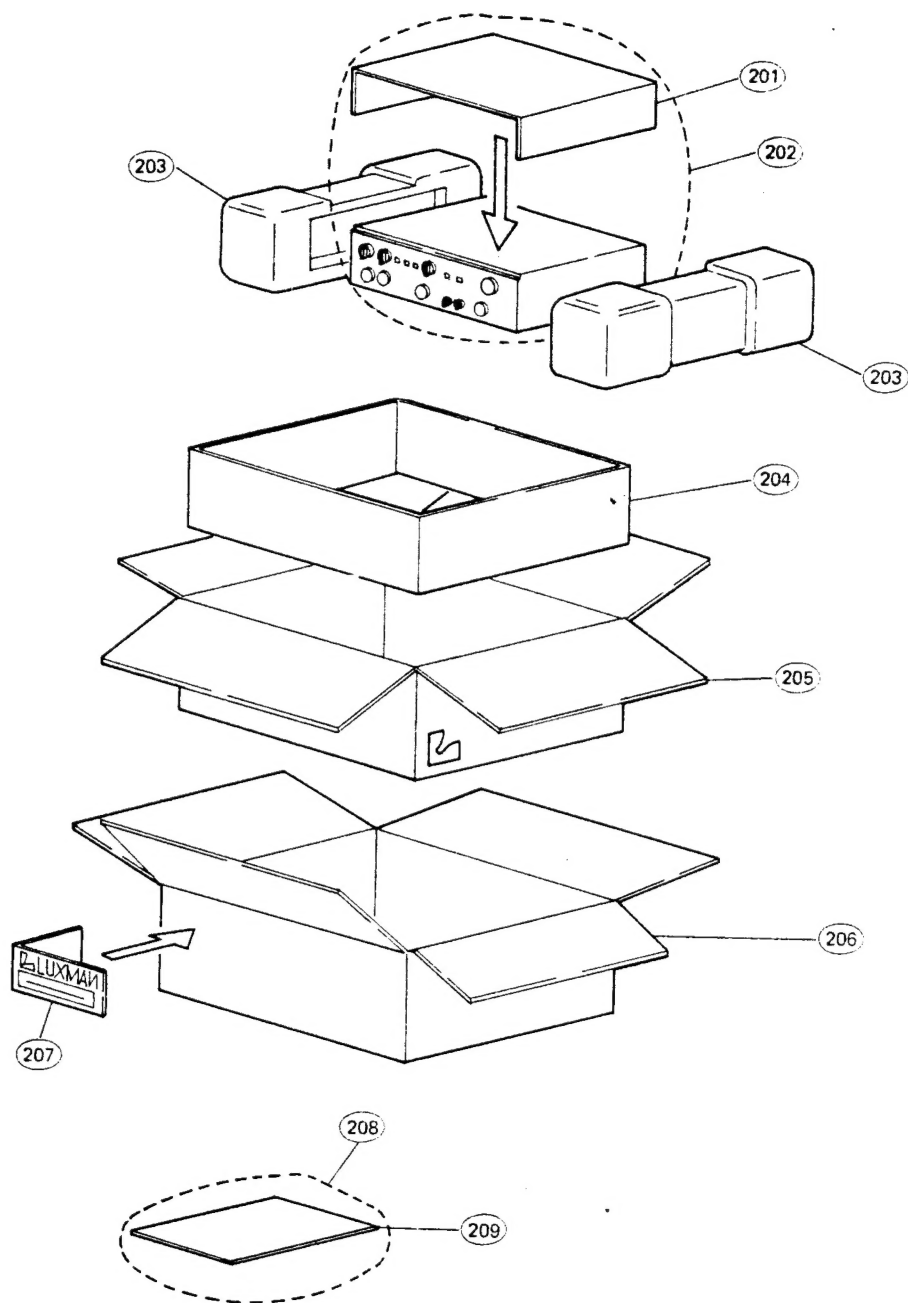


# Exploded View Parts List

Symbol No.	Parts No. (L-510)	Parts No. (L-530)	Description	Q'ty
1			Ventilation (J,U)	1
2	WT1005A	WT1005A	Ventilation (A)	6
3	YNE050B	YNE050B	Nut, 5F (J)	24
4	WB1101	WB1101	Wooden Case (A)	1
	WB1096	WB1096	Wooden Case (J,U)	1
5	YWA040A	YWA040A	Washer, 4#	4
6	WD1144	WD1144	Escutcheon	4
7	YAA40C20	YAA40C20	Screw, M4x20	4
8	UD1055	UD1055	Panel, Side	1
9	AC0054	AC0054	Socket, Voltage Selector (A)	1
10	AC0014	AC0014	Plug, Voltage Selector (A)	1
11	CE1453		Cap, 63WV 15,000uF	2
		CE1456	Cap, 71WV 30,000uF	2
12	YJB30A06		Screw, M3x6 TP	4
		YJB40A06	Screw, M4x6 TP	4
13	URL1332	URL1332	Bkt., 1332	1
14	TD0110		Diode, 55VB40F	1
		TD0182	Diode, S10VB40F	1
15			PB-1394-B	1
16	CQ0184	CQ0184	Cap, 120V 1,500pF St	2
17	CQ2006	CQ2006	Cap, 120V 0.47uF F1	2
18			PB-1392-2	1
19	URL1330	URL1330	Bkt., 1330	1
20	PT2583		Trans, Power P-2583 (J)	1
	PT2583		Trans, Power P-2585 (E)	1
	PT2585A		Trans, Power P-2585A (A)	1
		PT2587	Trans, Power P-2587 (J)	1
		PT2589	Trans, Power P-2589 (E)	1
		PT2589A	Trans, Power P-2589A (A)	1
21	AH0016	AH0016	Holder, Fuse (J)	1
	AH0019	AH0019	Holder, Fuse (A)	1
22	BF0400		Fuse 6A (J)	1
	BF0213	BF0213	Fuse 4A (A)	1
		BF0403	Fuse 7A (J)	1
23	SP0090	SP0090	SW, Power (A)	1
	SP0037	SP0037	SW, Power (J)	1
24	UJ1092	UJ1092	Cover (A)	3
25	AC0010	AC0010	Outlet, AC (A)	3
	AC0055	AC0055	Outlet, AC (J)	3
26	YWE040A	YWE040A	Washer, 4#	2
27	YJB40A08	YJB40A08	Screw, M4x8	4
28	BU0033	BU0033	Bush, Cord (AK,AD,AM)	1
	BU0039	BU0039	Bush, Cord (AG)	1
	BU0080	BU0080	Bush, Cord (J)	1
29	BK0018	BK0018	AC Cord (EZ)	1
	BK0022	BK0022	AC Cord (AK,AD,AM)	1
	BK0023	BK0023	AC Cord (AG)	1
	BK0048	BK0048	AC Cord (J)	1
30	AL0001	AL0001	Lamp (J)	1
31	UZ1244	UZ1244	Housing, LPS (J)	1
32	UZ1245	UZ1245	Terminal, LPS (J)	1
33	YJB30C08	YJB30C08	Screw	14
34			PB-1413 (AD)	1
			PR-1392-6A	1
35	AG0048	AG0048	Terminal, GND	1
36			PR-1394-7	1
37			PB-1394-5	1
38			PB-1392-3	1
39	UC1208-1	UC1208-5	Panel, Rear (J)	1
	UC1208-2	UC1208-6	Panel, Rear (U)	1
	UC1208-3	UC1208-7	Panel, Rear (E)	1
	UC1219-1	UC1209-2	Panel, Rear (S)	1
40	UH1035	UH1035	Channel	1
41	BE1086	BE1086	Heat Sink	2
42			PB-1393-1	2

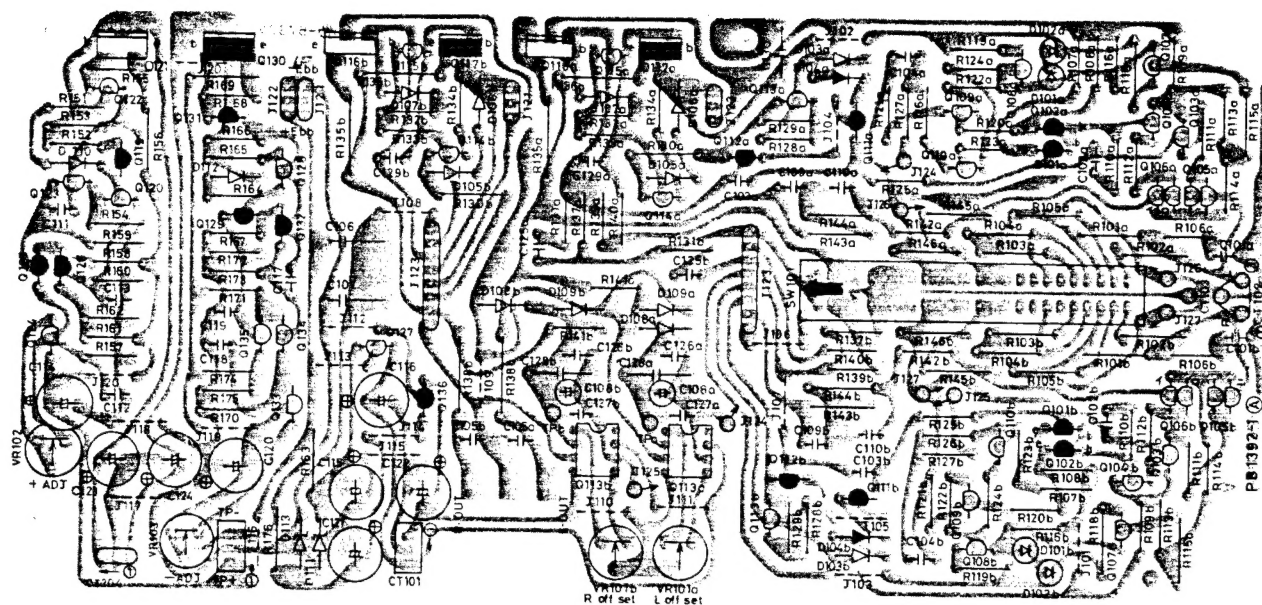
Symbol No.	Parts No. (L-510)	Parts No. (L-530)	Description	Q'ty
43			PB-1393-2	2
44	TR0271		TR, 2SA1075	4
		TR0376	TR, 2SA1076	4
45	TR0272		TR, 2SC2525	4
		TR0375	TR, 2SC2526	4
46	UR1331	UR1331	Bkt.	4
47	YJB30A08	YJB30A08	Screw, M3x8	16
48	YAA30A12	YAA30A12	Screw, M3x12	8
49	UR1401	UR1401	Bkt.	2
50	AY1028	AY1028	Relay, Protector	2
51	TV0026	TV0026	Varistor STV-2H	2
52	UK1121	UK1121	Plate	1
53			PB-1392-4	1
54	SZ0023-1	SZ0023-1	Label, Remote	1
55	YJB40A08	YJB40A08	Screw, M4x8	12
56	UD1055-1	UD1055-1	Panel, Side	1
57			PB-1392-4	1
58	UH1035-1	UH1035-1	Channel	1
59			PB-1394-3	1
60	YJB30A06	YJB30A06	Screw	2
61	UZ1294	UZ1294	Shaft	1
62	UZ1293	UZ1293	Shaft	2
63			PB-1393-3	1
64			PB-1394-1	1
65			PB-1394-4	1
66			PB-1394-2	1
67	AL0069	AL0069	Lamp, 12V 75MA	1
68	UZ1077	UZ1077	Bush, Lamp	1
69			PB-1394-6	1
70			PB-1392-5	1
71	UK1126	UK1126	Plate	1
72			PB-1393-4	1
73	UB1074-1	UB1074-1	Panel, Sub	1
74	WC1037	WC1037	Ornament Plate	2
75	YAA30A08	YAA30A08	Screw, M3x8	4
76	UW1153	UW1153	Spacer	2
77	WE1103	WE1103	Protector	11
78	UU1042-1	UU1042-1	Spring	11
79	WJ1162-2	WJ1162-2	Knob	3
80	WZ1188	WZ1188	Diffuser	2
81	WE1113	WE1113	Protector	2
82	UW1151	UW1151	Spacer	2
83	WD1141	WD1141	Escutcheon	3
84	WJ1165-1	WJ1165-1	Knob	6
85	WJ1166-1	WJ1166-1	Knob	1
86	WJ1165-2	WJ1165-2	Knob	1
87	WC1020	WC1020	Acryl, Pilot	1
88	WD1140	WD1140	Escutcheon	1
89	WD1142	WD1142	Escutcheon	3
90	WE1112	WE1112	Protector	3
91	WQ5005	WQ5005	Fiber	1
92	Non Use	Non Use		
93	WH1132	WH1132	Knob	3
94	WK1134	WK1134	Knob	3
95	WJ1164	WJ1164	Knob	3
96	WH1133	WH1133	Knob	3
97	WK1135	WK1135	Knob	1
98	WJ1163	WJ1163	Knob	1
99	WA1242-2	WA1242-1	Panel, Front	1
100	UW1156	UW1156	Spacer	2
101	WN1026	WN1026	Foot	2
102	WN1025	WN1025	Felt, Foot	4
103	YAA40A25	YAA40A25	Screw, M4x25	2
104	YAA40A14	YAA40A14	Screw, M4x14	2
105	YCB30A08	YCB30A08	Screw, M3x8	2
106	YAA40A08	YAA40A08	Screw, M4x8	6
107	UE1115	UE1115	Plate, Bottom	1

# Packing Material Parts List



Symbol No.	Stock No. L-510	Stock No. L-530	Description
201	WZ1101	WZ1101	Paper, Protector
202	XC1018A	XC1018A	Sack, Poly
203	XB1058	XB1058	Pad, Tray
204	XD1049	XD1049	Pad
205	XA1310	XA1311	Carton, Pkg.
206	XH1061	XH1061	Outer Carton
207	XG1068	XG1068	Label, Voltage (120V)
	XG1069	XG1069	Label, Voltage (220V)
	XG1070	XG1070	Label, Voltage (240V)
208	XC1031	XC1031	Sack, Poly
209	ME0247	ME0247	Owner's Manual (EX)
	MA0150	MA0152	Owner's Manual (J)

# PB1392-1A Parts List



Symbol No.	Stock No.	Description
(Slide Switch)		
SW101	SS0144	SSR26601D (Phono MM,MC)
(IC)		
Q113a,b	TC0197	TL071 CP
(Transistor,FET)		
Q101a,b	TR0091	2SA836
Q102a,b	TR0091	2SA836
Q103a,b	TR0323	2SC1845
Q104a,b	TR0323	2SC1845
Q105a,b	TF0028	2SK170-BL pair (L510)
Q106a,b	TF0018	2SK147-BL pair (L530)
	TF0028	2SK170-BL pair (L510)
Q107a,b	TF0018	2SK147-BL pair (L530)
	TR0264	2SC2235
Q108a,b	TR0351	2SC2320
Q109a,b	TR0351	2SC2320
Q110a,b	TR0351	2SC2320
Q111a,b	TR0091	2SA836
Q112a,b	TR0332	2SA857-V
Q113a,b	TR0351	2SC2320
Q114a,b	TR0331	2SC1438-V
Q115a,b	TR0331	2SC1438-V
Q116a,b	TR0159	2SD415
Q117a,b	TR0158	2SB549
Q119	TR0314	2SA999
Q120	TR0351	2SC2320
Q121	TR0177	2SD525

Symbol No.	Stock No.	Description
Q122	TR0351	2SC2320
Q123	TR0351	2SC2320
Q124	TF0033	2SK30A-TM
Q125	TR0314	2SA999
Q126	TR0314	2SA999
Q127	TR0264	2SC2235
Q128	TR0351	2SC2320
Q129	TR0314	2SA999
Q130	TR0176	2SB595
Q131	TR0314	2SA999
Q132	TR0314	2SA999
Q133	TF0033	2SK30A-TM
Q134	TR0351	2SC2320
Q135	TR0351	2SC2320
Q136	TR0263	2SA965
(Diode,LED)		
D101a,b	TD0224	SEL1110S red
D102a,b	TD0224	SEL1110S red
D103a,b	TD0227T	1SS41
D104a,b	TD0018	1K188FM-1
D105a,b	TD0227T	1SS41
D106a,b	TD0227T	1SS41
D107a,b	TD0227T	1SS41
D108a,b	TD0227T	1SS41
D109a,b	TD0227T	1SS41
D110	TD0227T	1SS41
D111	TD0043T	WZ-130

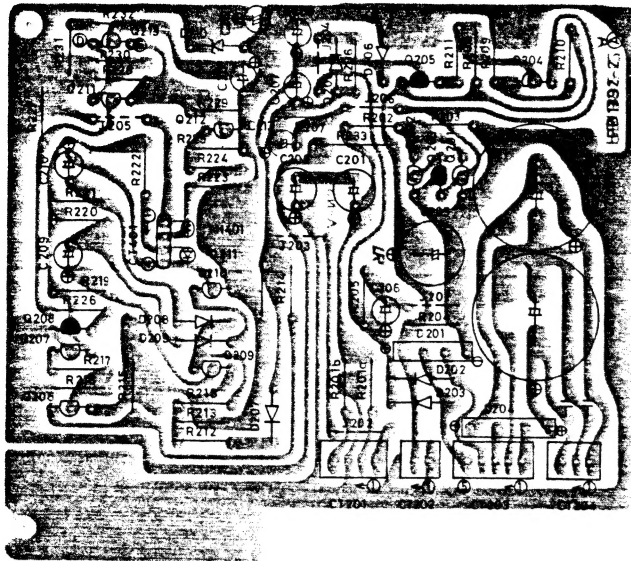


# PB1392-1A Parts List

Symbol No.	Stock No.	Description
D112	TD0227T	1SS41
D113	TD0043T	WZ-130
(Semi-Fixed Resistor)		
VR101a,b	RT0016	SR29R 10KBx2
VR102	RT0124	SR29R 2.2KB
VR103	RT0124	SR29R 2.2KB
(Capacitor)		
C101a,b	CQ1403	100pF St
C102a,b	CQ1430	2700pF St
C103a,b	CM0136	2pF Mi
C105a,b	CQ1403	100pF St
C106	CQ3272	10000pF St
C107	CQ3272	10000pF St
C108a,b	CE1975B	2.2uF 50V BP El
C109a,b	CQ3272	1000pF St
C110a,b	CQ1430	2700pF St
C111	CM0050	10P Mi
C112	CQ1436	4700pF St
C113	CK0155T	0.01uF Ce
C114	CE1981	47uF 50V El
C115	CE1722	220uF 16V El
C116	CE1722	220uF 16V El
C117	CM0050	10pF Mi
C118	CQ1436	4700pF St
C119	CK0155T	0.01uF Ce
C120	CE1981	47uF 50V El
C121	CE1722	220uF 16V El
C122	CE1722	220uF 16V El
C123	CE1757T	47uF 50V El
C124	CE1757T	47uF 50V El
C125a,b	CQ1421	820pF St
C126a,b	CQ2013	0.22uF 120V Fi
C127a,b	CQ5080	1500pF St
C130	CK0146	0.04uF Ce
(Resistor)		
R101a,b	RD0442	100K 1/3W Rd
R102a,b	RD0483	39 1/3W Rd
R103a,b	RD0442	100K 1/3W Rd
R104a,b	RD0481	56 1/3W Rd
R105a,b	RD0474	220 1/3W Rd
R106a,b	RB0360	330 Rd
R107a,b	RB0348T	100 Rd
R108a,b	RB0348T	100 Rd
R109a,b	RB0404T	22K Rd
R110a,b	RB0324T	10 Rd
R111a,b	RB0348T	100 (L510) Rd
R112a,b	RB0348T	100 (L510) Rd
R113a,b	RB0392T	6.8K Rd
R114a,b	RB0352	150 Rd
R115a,b	RD2582	1K 1/2W Rd
R116a,b	RB0410T	39K Rd
R118a,b	RS1459	180 1/3W Rf
R119a,b	RB0370T	820 Rd

Symbol No.	Stock No.	Description
R120a,b	RB0392T	6.8K Rd
R121a,b	RB0340T	47 Rd
R122a,b	RB0376T	1.5T Rd
R123a,b	RB0392T	6.8K Rd
R124a,b	RB0376T	1.5K Rd
R125a,b		Jumper
R126a,b		Jumper
R127a,b	RB0340T	47 Rd
R128a,b	RB0412T	47K Rd
R129a,b	RB0394T	8.2K Rd
R130a,b	RD2612	18K 1/2W Rd
R131a,b	RB0352T	150 Rd
R132a,b	RB0392T	6.8K Rd
R133a,b	RB0394T	8.2K Rd
R134a,b	RB0346T	82 Rd
R135a,b	RS2502L	15 1/2W Rd
R136a,b	RS2502L	15 1/2W Rd
R137a,b	RD2666	3.3M 1/2W Rd
R138a,b	RS2508L	47 1/2W Rd
R139a,b	RB0452T	2.2M Rd
R140a,b	RB0452T	2.2M Rd
R141a,b	RB0448T	1.5M Rd
R142a,b	RB0332T	22 Rd
R143a,b	RD0436	330K 1/3W Rd
R144a,b	RD0449	27K 1/3W Rd
R145a,b	RD0489	10 1/3W Rd
R146a,b	RD0474	220 1/3W Rd
R151	RS1847	82 Rf
R152	RS1847	82 Rf
R153	RB0432T	330K Rd
R154	RS1873	820 Rf
R155	RS1851	120 Rf
R156	RS2501L	10 1/2W Rf
R157	RB0402T	18K Rd
R158	RB0390T	5.6K Rd
R159	RB0380T	2.2K Rd
R160	RB0380T	2.2K Rd
R161	RB0396T	10K Rd
R162	RB0389T	5.1K Rd
R163	RD2592	2.7K 1/2W Rd
R164	RS1847	82 Rf
R165	RS1847	82 Rf
R166	RB0432T	330K Rd
R167	RS1873	820 Rf
R168	RS1851	120 Rf
R169	RS2501L	10 1/2W Rf
R170	RB0402T	18K Rd
R171	RB0390T	5.6K Rd
R172	RB0380T	2.2K Rd
R173	RB0380T	2.2K Rd
R174	RB0396T	10K Rd
R175	RB0389T	5.1K Rd
R176	RD2592	2.7K 1/4W Rd
	RB0352	150 Rd

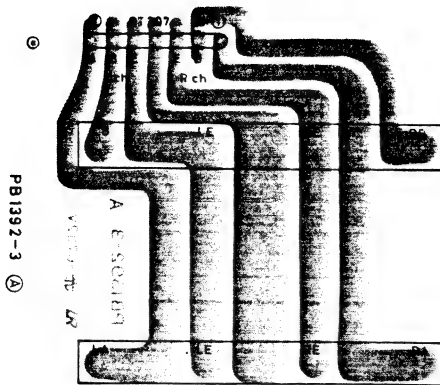
# PB1392-2A Parts List



Symbol No.	Stock No.	Description
(Transistor, FET)		
Q201	TR0351	2SC2320
Q202	TR0351	2SC2320
Q203	TR0314	2SA999
Q204	TR0351	2SC2320
Q205	TR0008	2SA562
Q206	TR0351	2SC2320
Q207	TR0351	2SC2320
Q208	TR0314	2SA999
Q209	TR0351	2SC2320
Q210	TR0351	2SC2320
Q211	TR0351	2SC2320
Q213	TF0030	2SK117Y
(Diode, LED)		
D201	TD0137	S1VB10
D202	TD0236	S5500G
D203	TD0236	S5500G
D204	TD0145	SVB10-200
D205	TD0227T	1SS41
D206	TD0236	S5500G
D207	TD0227T	1SS41
D208	TD0227T	1SS41
D209	TD0227T	1SS41
D210	TD0023T	WZ-071
D211	TD0232	EAA5534S

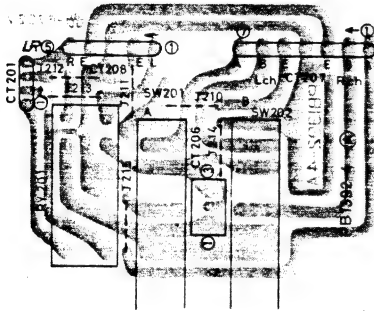
Symbol No.	Stock No.	Description	
(Resistor)			
R201a,b	RB0400T	15K	Rd
R202	RB0372T	1K	Rd
R203	RB0382T	2.7K	Rd
R204	RB0396T	10K	Rd
R205	RB0396T	10K	Rd
R206	RB0420T	100K	Rd
R207	RB0412T	47K	Rd
R208	RB0396T	10K	Rd
R209	RB0388T	4.7K	Rd
R210	RB0392T	6.8K	Rd
R211	RB0372T	1K	Rd
R212	RB0396T	10K	Rd
R213	RB0396T	10K	Rd
R214	RB0396T	10K	Rd
R215	RB0400	15K	Rd
R216	RB0396T	10K	Rd
R217	RB0396T	10K	Rd
R218	RB0388T	4.7K	Rd
R219	RB0366T	560	Rd
R220	RB0412T	47K	Rd
R221	RB0412T	47K	Rd
R222	RB0356T	220	Rd
R226	RB0396T	10K	Rd
R227	RB0396T	10K	Rd
R228	RB0388T	4.7K	Rd
R229	RB0388T	4.7K	Rd
R230	RB0424T	150K	Rd
R231	RB0452T	2.2M	Rd
R232	RB0452T	2.2M	Rd
R233	RS1453	100	Rf
	RB0460	4.7M	Rd
	RB0428	220K	Rd
	RB0398	120K	Rd
(Capacitor)			
C201	CE1722	220uF 16V	E1
C202	CE1722	220uF 16V	E1
C203	CE1909	1000uF 50V	E1
C204	CE1909	1000uF 50V	E1
C205	CE1820	3300uF 16V	E1
C206	CE1750T	1uF 50V	E1
C209	CE1717T	10uF 16V	E1
C210	CE1717T	10uF 16V	E1
C211	CE1711T	100uF 10V	E1
C212	CE1717T	10uF 16V	E1
C213	CE1717T	10uF 16V	E1
C217	CE1721T	100uF 16V	E1
C218	CE1752T	3.3uF 50V	E1

## PB1392-3A Parts List



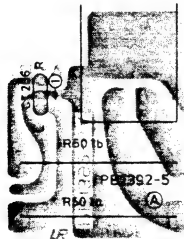
Symbol No.	Stock No.	Description
(Speaker Terminal)		
	AT0110	T-5631

## PB1392-4A Parts List



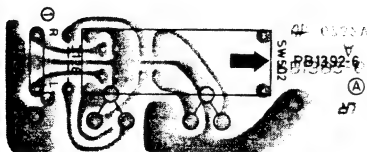
Symbol No.	Stock No.	Description
(Push Switch)		
SW201-202	SP0262	SUF23(speaker)
(Relay)		
RY201	AY1019	VB12MC

## PB1392-5A Parts List



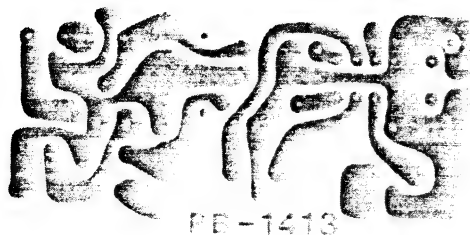
Symbol No.	Stock No.	Description
(Head Phone Jack)		
	AJ0022	HLJ0305-01-020
(Resistor)		
R501a,b	RS3454	470 3W Rf

## PB1392-6A Parts List



Symbol No.	Stock No.	Description
(4P Pin Jack)		
	AT0151	T5754AA
(Slide Switch)		
SW502	SS0143	SSR22401D (function)

## PB1413 Parts List



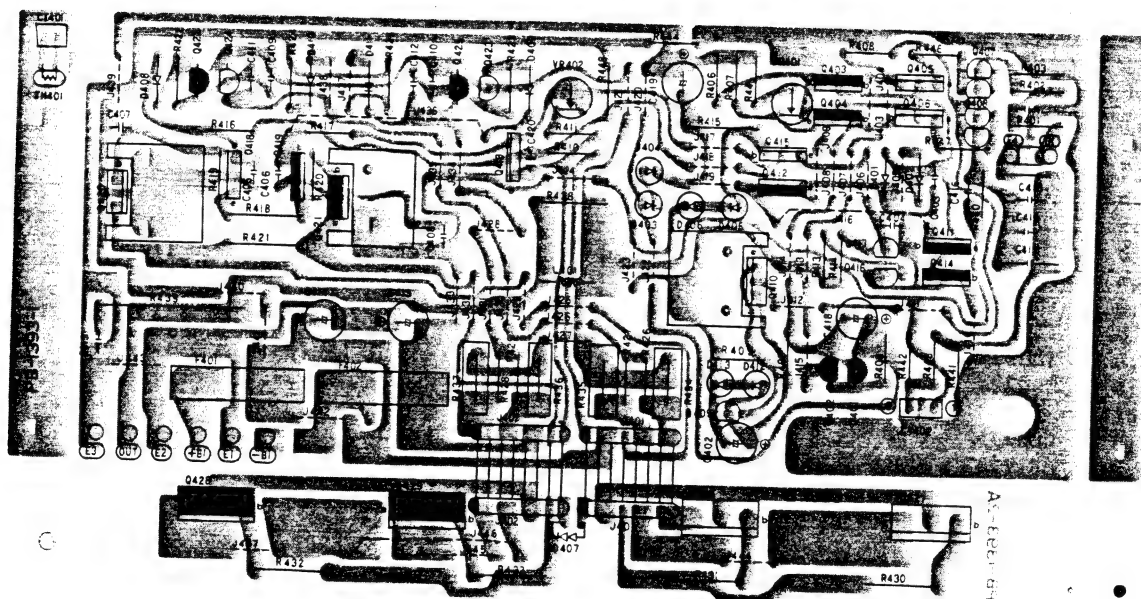
Symbol No.	Stock No.	Description
(4P Pin Jack)		
	AT0151	T5754AA
(Slide Switch)		
SW502	SS0143	SSR22401D (function)
(Choke Coil)		
	LA1143	47uH
(Capacitor)		
	CQ0172	330pF St
(Resistor)		
	RB0380	2.2K Rd

## PB1392-7A Parts List



Symbol No.	Stock No.	Description
(LED)		
D211	TD0232	EAA5534S org. (warm-up)

## PB1393-1A,2A Parts List



Symbol No.	Stock No.	Description
(Fuse Holder)		
	AH0028	23165102-C (A)
(Fuse)		
F401a,b	BF0212	T3.15A (A)
F402a,b	BF0212	T3.15A (A)
(Varistor)		
D407	TV0026	STV-2H
(Choke Coil)		
L401a,b	LA1020	LUX 1020
(Relay)		
	AY1028	T110.10MI

Symbol No.	Stock No.	Description
(Semi-Fixed Resistor)		
VR401a,b	RT0015	SR29R 1KB
VR402a,b	RT0015	SR29R 1KB
(Transistor, FET)		
Q401a,b	TR0320	2SA992-E
Q402a,b	TR0320	2SA992-E
Q403a,b	TR0342	2SA899-BV
Q404a,b	TR0342	2SA899-BV
Q405a,b	TR0318	2SC1904-BV

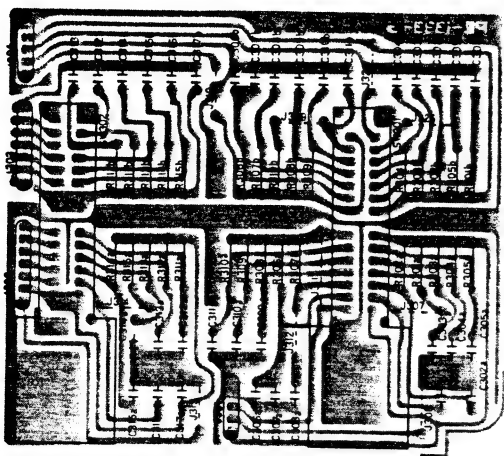
1-510/1-520

## PB1393-1A,2A Parts List

Symbol No.	Stock No.	Description
Q406a,b	TR0318	2SC1904-BV
Q407a,b	TF0028	2SK170-BL Pair
Q408a,b	TF0028	2SK170-BL Pair
Q410a,b	TR0190	2SC1624
Q411a,b	TR0342	2SA899-BV
Q412a,b	TR0342	2SA899-BV
Q413a,b	TR0318	2SC1904-BV
Q414a,b	TR0342	2SA899-BV
Q415a,b	TR0318	2SC1904-BV
Q416a,b	TR0323	2SC1845
Q417a,b	TR0323	2SC1845
Q418a,b	TR0318	2SC1904-BV
Q419a,b	TR0342	2SA899-BV
Q420a,b	TR0242	2SC2336
Q421a,b	TR0241	2SA1006
Q422a,b	TR0320	2SA992-E
Q423a,b	TR0323	2SC1845
Q424a,b	TR0323	2SC1845
Q425a,b	TR0320	2SA992E
Q426a,b	TR0272	2SC2525 (L-510)
	TR0375	2SC2526 (L-530)
Q427a,b	TR0272	2SC2525 (L-510)
	TR0375	2SC2526 (L-530)
Q428a,b	TR0271	2SA1075 (L-510)
	TR0376	2SA1076 (L-530)
Q429a,b	TR0271	2SA1075 (L-510)
	TR0376	2SA1076 (L-530)
(Diode,LED)		
D401a,b	TD0227T	1SS41
D402a,b	TD0227T	1SS41
D403a,b	TD0224	SEL1110S red
D404a,b	TD0224	SEL1110S red
D405a,b	TD0224	SEL1110S red
D406a,b	TD0224	SEL1110S red
D408a,b	TD0227T	1SS41
D409a,b	TD0227T	1SS41
D410a,b	TD0227T	1SS41
D411a,b	TD0227T	1SS41
D412a,b	TD0224	SEL1110S red
D413a,b	TD0224	SEL1110S red
(Capacitor)		
C401a,b	CQ0275	33pF St
C402a,b	CE1712T	220uF 10V El
C403a,b	CQ1401	1000pF St
C404a,b	CQ1432	3300pF St
C405a,b	CM0177	22pF Mi
C406a,b	CM0177	22pF Mi
C407a,b	CM0178	47pF Mi
C408a,b	CM0178	47pF Mi
C411a,b	CQ0026T	0.001uF My
C412a,b	CQ0026T	0.001uF My
C413a,b	CQ3063	0.047uF Pp
C414a,b	CE1780	47uF 100V El
C415a,b	CE1780	47uF 100V El
C416a,b	CM0050	10pF Mi
C417a,b	CE1977B	4.7uF 50V BP El
	CQ2020	1uF 120V (L530) Fi

Symbol No.	Stock No.	Description
C418a,b	CQ2006	0.47uF 120V Fi
	CE1977B	4.7uF 50V (L530) El
C418a,b	CE1712T	220uF 10V El
C419a,b	CQ5080	1500pF St
C419a,b	CE1712T	220uF 10V El
C420a,b	CM0058	220pF Mi
(Resistor)		
R401a,b	RB0364T	470 Rd
R402a,b	RB0348T	100 Rd
R403a,b	RB0442T	820K Rd
R404a,b	RS1875	1K Rf
R405a,b	RB0422T	120K Rd
R406a,b	RS1837	33 Rf
R407a,b	RS1837	33 Rf
R408a,b	RS1894	5.6K Rf
R409a,b	RS1857	220 Rf
R410a,b	RB0380T	2.2K Rd
R411a,b	RB0366T	560 Rd
R413a,b	RS1847	82 Rf
R414a,b	RS1847	82 Rf
R415a,b	RS2728L	47K 1W Rf
R416a,b	RS1849	100 Rf
R417a,b	RS1849	100 Rf
R418a,b	RS2521L	560 1/2W Rf
R419a,b	RS1849	100 Rf
R420a,b	RS1849	100 Rf
R421	RS2513L	120 1/2W Rf
R422a,b	RB0392T	6.8K Rd
R423a,b	RB0392T	6.8K Rd
R424a,b	RB0392T	6.8K Rd
R425a,b	RB0392T	6.8K Rd
R426a,b	RS1853	150 Rf
R427a,b	RS1853	150 Rf
R428a,b	RS1853	150 Rf
R429a,b	RS1853	150 Rf
R430a,b	RS2564L	4.7 1/2W Rf
R431a,b	RS2564L	4.7 1/2W Rf
R432a,b	RS2564L	4.7 1/2W Rf
R433a,b	RS2564L	4.7 1/2W Rf
R434a,b	RG0075	0.22 5W Rc
R435a,b	RG0075	0.22 5W Rc
R436a,b	RG0075	0.22 5W Rc
R437a,b	RG0075	0.22 5W Rc
R438a,b	RS2696L	4.7 1W Rf
R439a,b	RS5013L	22 3W Rf
R440a,b	RB0452T	2.2M Rd
	RB0448	1.5M (L530) Rd
R441a,b	RB0366T	560 Rd
R442a,b	RB0412T	47K Rd
	RD0446	47K 1/3W (L530) Rd
R443a,b	RB0394T	8.2K Rd
	RD0455	8.2K 1/3W (L530) Rd
R444a,b	RB0342T	56 Rd
R445a,b	RS1849	100 Rf
R446a,b	RS1849	100 Rf
R447a,b	RS1849	100 Rf
R448a,b	RD2666	3.3M 1/2W (L530) Rd

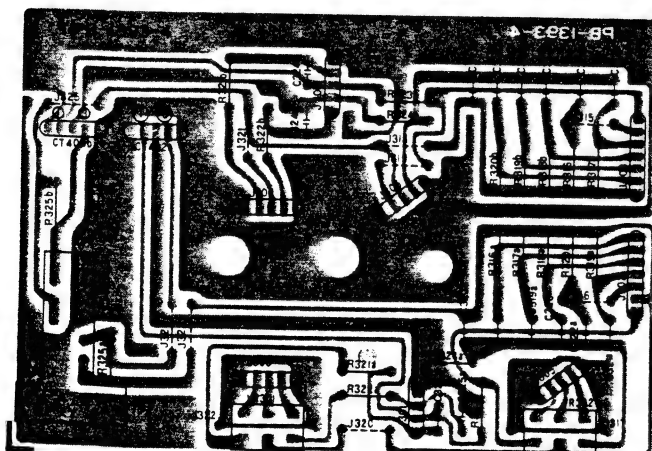
## PB-1393-3A Parts List



Symbol No.	Stock No.	Description	
(Slide Rotary Switch)			
SW301	SR0164	SRZW46S (turn over treble)	
SW302	SR0164	SRZW46S (trun over bass)	
(Capacitor)			
C301a,b	CQ0014T	0.015uF	My
C302a,b	CQ0016T	0.01uF	My
C303a,b	CQ0019T	0.0047uF	My
C304a,b	CQ0023T	0.0022uF	My
C305a,b	CQ1421	820pF	St

Symbol No.	Stock No.	Description	
C306a,b	CQ0027T	0.0068uF	My
C307a,b	CQ0007T	0.068uF	My
C308a,b	CQ0009T	0.047uF	My
C309a,b	CQ0013T	0.022uF	My
C310a,b	CQ0015T	0.012uF	My
C311a,b	CQ0019T	0.0047uF	My
C312a,b	CQ2252F	0.18uF	My
C313a,b	CQ0005T	0.1uF	My
C314a,b	CQ0008T	0.056uF	My
C315a,b	CQ0012T	0.027uF	My
C316a,b	CQ0017T	0.0082uF	My
C317a,b	CQ0014T	0.015uF	My
(Resistor)			
R301a,b	RB0452T	2.2M	Rd
R302a,b	RB0452T	2.2M	Rd
R303a,b	RB0452T	2.2M	Rd
R304a,b	RB0452T	2.2M	Rd
R305a,b	RB0452T	2.2M	Rd
R306a,b	RB0452T	2.2M	Rd
R307a,b	RB0452T	2.2M	Rd
R308a,b	RB0452T	2.2M	Rd
R309a,b	RB0452T	2.2M	Rd
R310a,b	RB0452T	2.2M	Rd
R311a,b	RB0452T	2.2M	Rd
R312a,b	RB0452T	2.2M	Rd
R313a,b	RB0452T	2.2M	Rd
R314a,b	RB0452T	2.2M	Rd
R315a,b	RB0452T	2.2M	Rd

## PB-1393-4A Parts List

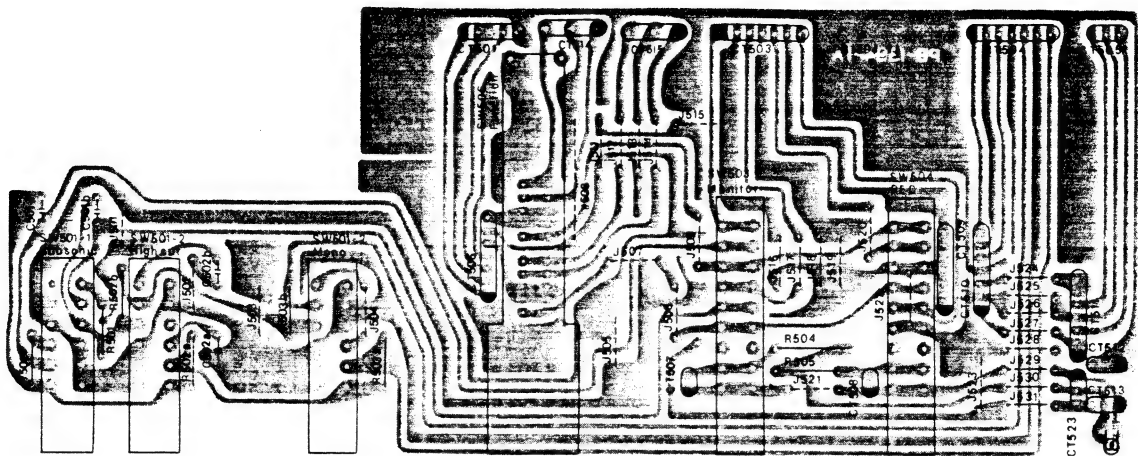


Symbol No.	Stock No.	Description
(Variable Resistor)		
VR301	RV0287	50KCx2 (treble)
VR302	RV0287	50KCx2 (bass)

Symbol No.	Stock No.	Description	
(Push Switch)			
SW303	SP0264	SUL122A (tone in)	
(Capacitor)			
C318a,b	CQ1334	1uF	My
C319a,b	CQ1339	0.56uF	My
C320a,b	CQ2254	0.27uF	My
C321a,b	CQ2251	0.15uF	My
C322a,b	CQ0009T	0.047uF	My
C323a,b	CQ0006T	0.082uF	My
C324a,b	CQ0024T	0.0015uF	My
C325a,b	CQ0027T	0.0068uF	My
(Resistor)			
R316a,b	RB0452T	2.2M	Rd
R317a,b	RB0452T	2.2M	Rd
R318a,b	RB0452T	2.2M	Rd
R319a,b	RB0452T	2.2M	Rd
R320a,b	RB0452T	2.2M	Rd
R321a,b	RB0382T	2.7K	Rd
R322a,b	RB0366T	560	Rd
R323a,b	RB0396T	10K	Rd
R324a,b	RB0378T	1.8K	Rd
R325a,b	RB0444T	1M	Rd



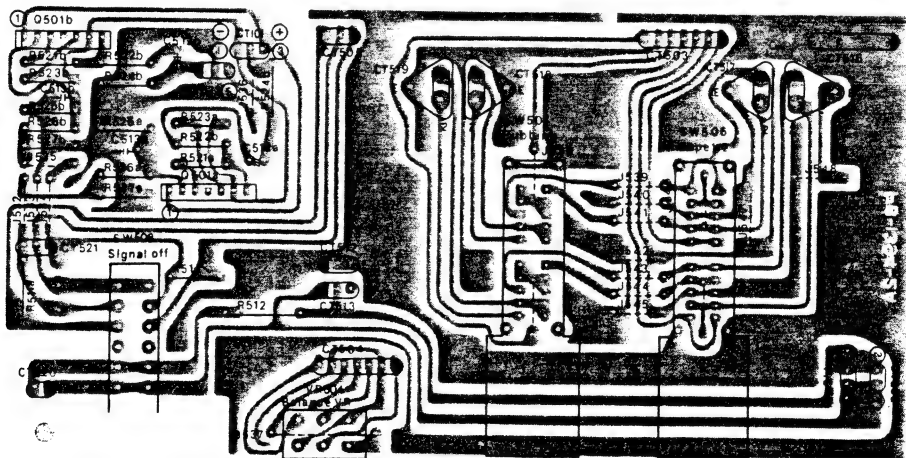
# PB1394-1A Parts List



Symbol No.	Stock No.	Description
(Switch)		
SW501	SP0265	SUL331A (subsonic high cut mono)
SW503	SP0266	SUL121A (monitor)
SW504	SP0266	SUL121A (recording)
SW506	SR0172	SRZW (function)
(Pilot Lamp)		
P.L.	AL0069	12V 75mA

Symbol No.	Stock No.	Description
(Capacitor)		
C501a,b	CQ2256	0.33uF My
C502a,b	CQ0027T	0.0068uF My
(Resistor)		
R501a,b	RB0444T	1M Rd
R502a,b	RB0444T	1M Rd
R503a,b	RB0392T	6.8K Rd
R504a,b	RS2519L	390 1/2W Rf
R505a,b	RS2519L	390 1/2W Rf

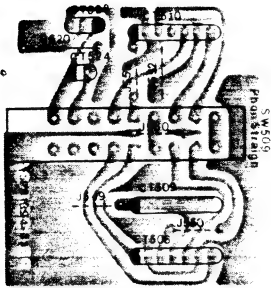
# PB1394-2A Parts List



Symbol No.	Stock No.	Description
(Variable Resistor)		
VR504	RV0288	250KMN (balance)
(Resistor)		
R511a,b	RB0396T	10K Rd
R512	RS2519L	390 1/2W Rd

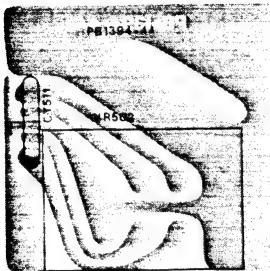
Symbol No.	Stock No.	Description
(Switch)		
SW506	SR0162	SRZW42N (tapel)
SW507	SR0163	SRZW43N (dubbing)
SW508	SP0267	SUL122A (signal off)

## PB1394-3A Parts List



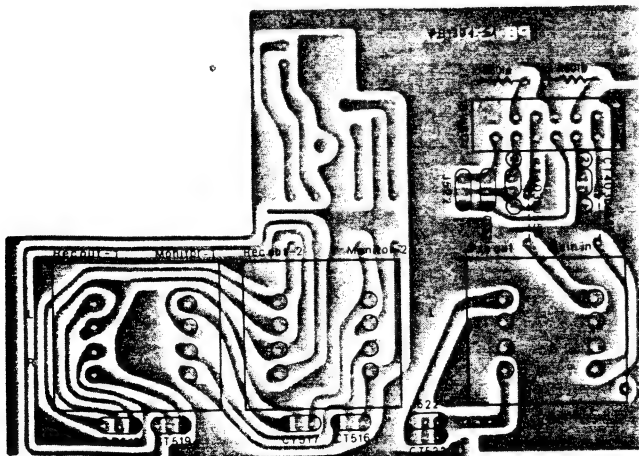
Symbol No.	Stock No.	Description
(Push Switch)		
SW509	SP0268	SUF12 (phono straight)
(Resistor)		
R520	RS2519L	390 1/2W Rd

## PB1394-4A Parts List



Symbol No.	Stock No.	Description
(Variable Resistor)		
VR502	RV0290	50Kx2 (volume)

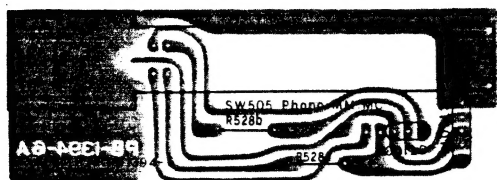
## PB1394-5A Parts List



Symbol No.	Stock No.	Description
(4P Pin Jack)		
	AT0150	T5757-AA
(Slide Switch)		
SW601	SS0135	SSB04202(signal processing)
(Resistor)		
R601a,b	RB0412T	47K Rd

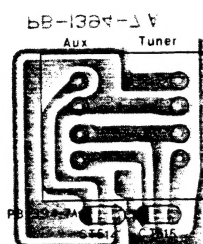


## PB1394-6A Parts List



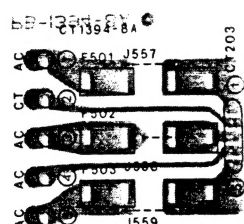
Symbol No.	Stock No.	Description
(Slide Rotary Switch)		
SW505	SR0161	SRZWMM (cartridge muto)
(Resistor)		
R528a,b	RB0416T	68K Rd

## PB1394-7A Parts List



Symbol No.	Stock No.	Description
(4P Pin Jack)		
	AT0150	T5757-AA
(Capacitor)		
	CE1718	22uF 16V E1

## PB1394-8A Parts List



Symbol No.	Stock No.	Description
(Fuse Holder)		
	AH0028	23165102-C (A)
(Fuse)		
F501	BF0206	T500mA (A)
F502	BF0206	T500mA (A)
F503	BF0208	T1A (A)

## PB1394 LED PCB Parts List



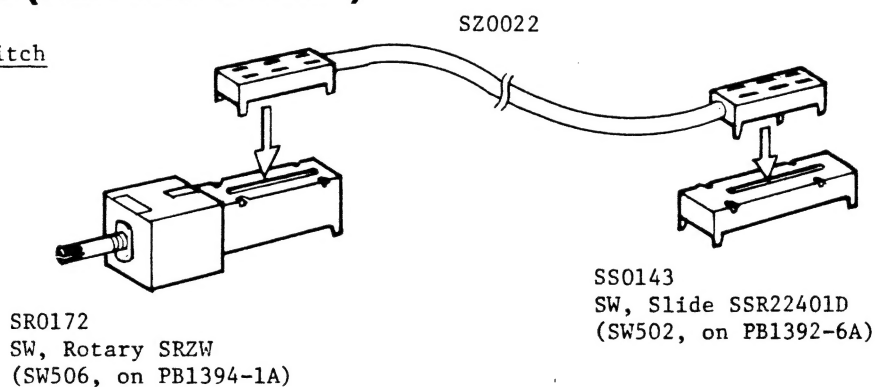
Symbol No.	Stock No.	Description
(LED)		
D501	TD0233	EBG5534S grn. (monitor)
D502	TD0232	EAA5534S org. (recording)
D503	TD0232	EAA5534S org. (signal off)
D504	TD0233	EBG5534S grn. (photo straight)

## Miscellaneous Parts List

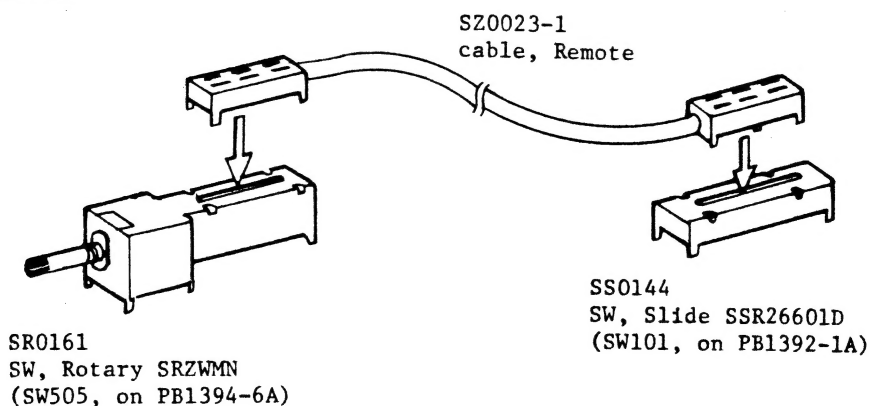
Symbol No.	Stock No.	Description	Remarks
(Switch)			
SW001	SP0090	ADG5P502 5A	Power
	SP0037	SDG5P001 10A	Power (J)
(Lamp)			
P.L.	AL0069	12V 75mA	Pilot
(Fuse)			
F001	BF0400	6A (L-510)	(EZ,J)
	BF0403	7A (L-530)	(EZ,J)
	BF0213	4A(T)	(AK,AG)
	BF0118	4A (L-510)	(EK,EG)
	BF0119	5A (L-530)	(EK,EG)
(Diode)			
D001	TD0110	S5VB40F (L-510)	
	TD0182	S10VB40F (L-530)	
(Capacitor)			
C001	CU0012	0.01uF 400V My	(J)
	CU0081	0.01uF 400V My	
C002	CU0012	0.01uF 400V My	(J)
	CU0081	0.01uF 400V My	
C003	CK0159	0.01uF 25V Ce	
C506	CE1453	15,000uF 63V E1	
	CE1456	30,000uF 71V E1	
C507	CE1453	15,000uF 63V E1	
	CE1456	30,000uF 71V E1	
C508	CQ2006	0.47uF 120V Fi	
C509	CQ2006	0.47uF 120V Fi	
C510	CQ0184	1500pF 250V St	
C511	CQ0184	1500pF 250V St	

## Procedure (Remoto Switch)

### A) Function Switch



### B) Cartridge Switch



## Destination's Parts List

Description	Power Source			
	EZ 120V Canada	AG 240V England & Oceania	AD,AM,AK 220V Europe	J 100V Japan
Rear Panel (L-530) " " (L-510)	UC1208-7 ----	UC1219-2 UC1219-1	UC1219-2 UC1219-1	UC1208-5 UC1208-1
AC Cord Stopper, Cord	BK0018 BU0033	BK0023 BU0039	BK0022 BU0033	BK0048 BU0080
Trans, Power (L-530) " " (L-510)	PT2589 ----	PT2589A PT2585A	PT2589A PT2585A	PT2587 PT2583
SW, Power	SP0090	SP0090	SP0090	SP0037
Fuse, Primary (L-530) " " (L-510)	BF0403 (7A) ----	BF0213 (4A) BF0213 (4A)	BF0213 (4A) BF0213 (4A)	BF0403 (7A) BF0400 (6A)
Holder, Fuse Primary	AH0016	AH0019	AH0019	AH0016
AC Voltage Selector Plug: Socket:	AC0014 AC0054	AC0014 AC0054	AC0014 AC0054	Non Use Non Use
AC Outlet	AC0010	Non Use	Non Use	AC0055

## Remarks

### Remarks

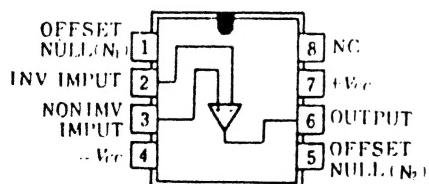
Capacitor: El...Electrolytic, Ce...Ceramic, ST...Styrol, Mi...Mica,  
My...Mylar, Pp...Polypropylene, Fi...Film

Resistor: Rd...Carbon, Rf...Flame Proof, Rc...Cement

All Resistors are in ohm 1/4 Watt.

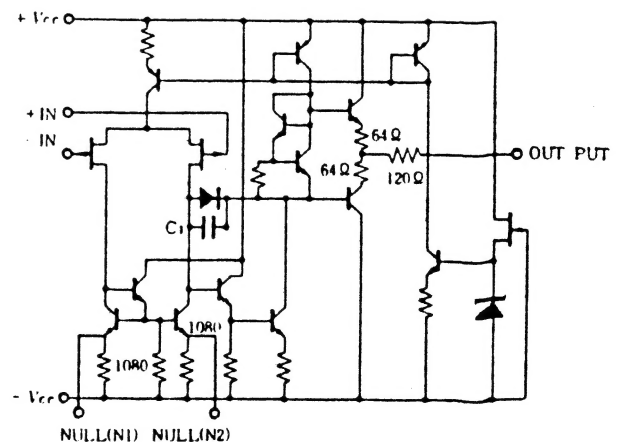
## IC Handling Guide

TL-071P (IC113a, b : Stock No. TC0197)



(Top View)

Equivalent Circuit (1/2)



# L-510 Schematic Diagram

